



# Advances in the Treatment of Sickle Cell Disease

MOVING TOWARD A CURE

Complimentary Virtual Symposium  
May 7—8, 2025



Memorial Sloan Kettering  
Cancer Center

# Overview

**The management of patients with Sickle Cell Disease (SCD) is a highly specialized field of hematology, growing in complexity due to advances in gene therapy and the rising frequency of hematopoietic stem cell transplants.**

This requires that healthcare providers, particularly those new to caring for patients with Sickle Cell Disease, be well-versed in advanced treatments and the management of this vulnerable and often under-served population.

This complimentary two-day symposium offers a foundational overview and explores the latest advances in Sickle Cell Disease, including pathophysiology, advances in medical management, stem cell transplant and gene therapy, management of multi-system complications, psychosocial implications, and accessibility to the wide spectrum of care from a global health perspective.

## Target Audience

This symposium is **complimentary for all participants** and is intended for nurse practitioners, physician assistants, nurses, physicians, and students interested in the complex care of patients with Sickle Cell Disease.

## Syllabus

After the symposium concludes, attendees will receive access to an online syllabus, which will include select PDFs of faculty presentations (slides) and recorded videos.

## Objectives

At the conclusion of this program, learners will be able to:

- Discuss the pathophysiology and genetic implications of SCD
- Address the common complications and clinical management of patients living with SCD
- Identify unique opportunities for individualized pain management utilizing evidenced based guidelines based on pain science for patients with SCD
- Recall current clinical management of acute vaso occlusive crisis in patients with SCD
- Identify mental health challenges and issues of health care equity in this patient population.
- Recognize the role of gene therapy and hematopoietic stem cell transplant, unique complications and management of patients with SCD

This symposium is complimentary for all participants.

Register online today:

[msk.org/SickleCellSymposium](https://msk.org/SickleCellSymposium)

## Symposium Planners



### COURSE DIRECTOR

#### **Joanne Torok-Castanza, MSN, RN, CPNP-PC, FNP**

Nurse Practitioner, Pediatric Transplantation and Cellular Therapy Program  
Memorial Sloan Kettering Cancer Center



### PHYSICIAN SPONSOR

#### **Maria Cancio, MD**

Head of Clinical Operations, Pediatric Stem Cell Transplant and Cellular Therapies, Pediatric Hematology-Oncology;  
Associate Attending, Memorial Sloan Kettering Cancer Center  
Associate Professor, Weill Cornell Medical College



### APP SPONSOR

#### **Nicole Zakak, MS, RN, CPNP, CPHON®**

Director, Advanced Practice Provider Quality and Professional Development  
Memorial Sloan Kettering Cancer Center

### PLANNING COMMITTEE MEMBERS

#### **Linda D'Andrea, MSN, RN, PPCNP-BC, CPHON®**

Advanced Practice Provider Education Specialist  
Memorial Sloan Kettering Cancer Center

#### **Lauren Murphy, MSN, RN, CPNP-AC**

Nurse Practitioner, Pediatric Transplantation and Cellular Therapy Program  
Memorial Sloan Kettering Cancer Center

#### **Kanayo Nwankwo, MD**

Fellow, Pediatric Hematology Oncology  
Memorial Sloan Kettering Cancer Center

#### **Natalie Sommerville-Brooks, MSN, RN, FNP-BC**

Department of Hematology/Oncology  
Brookdale Hospital Medical Center

#### **Claire Templeman, MSN, RN, CPNP-AC**

Nurse Practitioner, Pediatric Transplantation and Cellular Therapy Program  
Memorial Sloan Kettering Cancer Center

### PATIENT PERSPECTIVE

#### **Destiny Hannah**

# MSK Leadership Welcome

## **Andrew Kung, MD, PhD**

Chair, Department of Pediatrics  
Lila Acheson Wallace Chair for Pediatric Research  
Memorial Sloan Kettering Cancer Center

## Invited Faculty

### **Nkechi Azinge-Egbiri, JD, PhD**

Lecturer, Business and Commercial Law  
Lancaster University  
Lancaster, UK

### **Nnenna Badamosi, MD**

Assistant Professor,  
Pediatric Hematology and Oncology,  
Medical College of Georgia;  
Director of Clinical Development,  
Editas Medicine  
Augusta, GA

### **Yvonne Carroll, RN, JD**

Board Member, IASCNAPA;  
Director, Patient Services,  
Department of Hematology  
St. Jude Children's Research Hospital  
Memphis, TN

### **Sobenna George, MD**

Pediatric Endocrinologist;  
Assistant Professor of Pediatrics  
Department of Pediatrics,  
Division of Endocrinology  
Emory+ Children's Pediatric Institute  
Atlanta, GA

### **Christine Greco, MD**

Division Chief, Pain Medicine,  
Department of Anesthesiology,  
Critical Care and Pain Medicine,  
Boston Children's Hospital;  
Assistant Professor of Anaesthesia,  
Harvard Medical School  
Boston, MA

### **Julie Kanter, MD**

Co-Director, Lifespan Comprehensive  
Sickle Cell Center;  
Professor, Division of Hematology  
and Oncology;  
Director Adult Sickle Cell Clinic  
University of Alabama  
Birmingham, AL

### **Hamda Khan, MA**

Medical Anthropologist  
St Jude Children's Research Hospital  
Memphis, TN

### **Adam Levin, MD**

Associate Professor;  
Vice Chair of Clinical Operations,  
Department of Orthopaedic Surgery  
Johns Hopkins Medical Center  
Baltimore, MD

### **Deepa Manwani, MD**

Director of Hematology, Pediatric  
Hematology, Oncology and Cellular Therapy;  
Professor of Pediatrics  
Montefiore Medical Center  
Albert Einstein School of Medicine  
Bronx, NY

### **Ugochi Ogu, MD**

Associate Professor of Medicine,  
The University of Tennessee Health  
Science Center;  
Medical Director, Diggs-Kraus Comprehensive  
Sickle Cell Center - Regional One Health  
Memphis, TN

### **Monika Paroder, MD, PhD**

Associate Professor,  
Department of Pathology  
Albert Einstein College of Medicine  
Bronx, NY

### **Akshay Sharma, MD**

Associate Member, Pediatric Bone Marrow  
Transplantation and Cellular Therapy  
St Jude Children's Research Hospital  
Memphis, TN

**Lori Vick, RN, PhD**

Professor of Nursing,  
University of South Carolina;  
President, International Association of Sickle  
Cell Nursees and Professional Associates  
Columbia, SC

**Kusum Viswanathan, MD**

Chair, Department of Pediatrics  
Brookdale Hospital Medical Center  
Brooklyn, NY

**Candice Young-Deler**

Founder, Candice's Sickle Cell Fund, Inc.  
Bronx, NY

**Yaoping Zhang, MD**

Visiting Associate Professor of Pediatrics;  
Director, Division of Pediatric  
Hematology/Oncology  
SUNY Downstate Health Sciences University  
Brooklyn, NY

## Warrior Panel

At the close of day two, we're honored to host a Warrior Panel Discussion featuring the following panelists, sharing their insights on *Living with Sickle Cell Disease: Stories from Those Who Know It Best*.

**Sasha Arias**

**Bukola Bolarinwa**

**Mekhai Genfi**

**Destiny Hannah**

**Erick Hannah**

**Tamika Hearn**

**Kayla Smith-Owens**

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# Schedule

Wednesday, May 7

7:55 AM

ATTENDEE ZOOM SIGN-ON

## Opening Remarks and Keynote Address

MODERATOR: Joanne Torok-Castanza, MSN, RN, CPNP-PC, FNP

8:00 AM

### Welcome and Introduction

Joanne Torok-Castanza, MSN, RN, CPNP-PC, FNP

Nicole Zakak, MS, RN, CPNP, CPHON®

Andrew Kung, MD, PhD

8:10 AM

### KEYNOTE ADDRESS



### Optimizing Gene Therapy for People with Sickle Cell Disease

Julia Kanter, MD

Co-Director of the Lifespan Comprehensive Sickle Cell Center

Professor in the Division of Hematology and Oncology

University of Alabama at Birmingham

8:40

### Q&A and Discussion

## Back to Basics:

## Foundations of Sickle Cell Disease

MODERATOR: Joanne Torok-Castanza, MSN, RN, CPNP-PC, FNP

8:50 AM

### Pathophysiology of Sickle Cell Disease

Deepa Manwani, MD

9:20 AM

### Newborn Screening and Genetic Counseling

Yvonne Carroll, RN, JD

9:50 AM

### Q&A and Discussion

10:00 AM

BREAK

## Common Complications of Sickle Cell Disease: Diagnosis and Management

MODERATOR: Lauren Murphy, MSN, RN, CPNP-AC

10:15 AM

### Cardiovascular Complications of Sickle Cell Disease

Ugochi Ogu, MD

10:45 AM

### Renal Complications of Sickle Cell Disease

Kanayo Nwankwo, MD

- 11:15 AM **Orthopedic Complications of Sickle Cell Disease**  
Adam Levin, MD
- 11:45 AM **Q&A and Discussion**
- 11:55 AM LUNCH BREAK

## Optimizing Emergency Care for Patients with Sickle Cell Disease

MODERATOR: Maria Cancio, MD

- 12:35 PM **Management of Acute Complications: Acute Chest Syndrome, Splenic Sequestration, and Stroke**  
Yaoping Zhang, MD
- 1:20 PM **Case Study Review: Emergencies**  
Yaoping Zhang, MD
- 1:40 AM **Q&A and Discussion**
- 1:50 AM BREAK

## Supportive Care of Patients with Sickle Cell Disease: Strategies and Best Practice

MODERATOR: Claire Templeman, MSN, RN, CPNP-AC

- 2:00 PM **Medications to Manage Sickle Cell Disease**  
Nnenna Badamosi, MD
- 2:30 PM **Transfusion Considerations**  
Monika Paroder, MD, PhD
- 3:00 PM **Pain Management Considerations**  
Christine Greco, MD
- 3:30 PM **Q&A and Discussion**
- 3:40 PM **Closing Remarks**  
Maria Cancio, MD
- 3:50 PM ADJOURNMENT

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Thursday, May 8

7:55 AM ATTENDEE ZOOM SIGN-ON

8:00 AM **Welcome and Introduction**  
Joanne Torok-Castanza, MSN, RN, CPNP-PC, FNP

## Innovative Therapies: Advances and Future Directions

MODERATOR: Friederike Kogel

8:10 AM **Hematopoietic Stem Cell Transplant for the Treatment of Sickle Cell Disease**  
Maria Cancio, MD

9:10 AM **Gene Therapy and Sickle Cell Disease**  
Akshay Sharma, MD

10:10 AM **Q&A and Discussion**

10:25 AM BREAK

## It Takes a Village: Care of the Whole Patient with Sickle Cell Disease

MODERATOR: Lauren Murphy, MSN, RN, CPNP-AC

10:40 AM **Mental Health Effects and Psychosocial Implications**  
Lori Vick, RN, PhD

11:10 AM **Transitioning to Adult Health Systems**  
Kusum Viswanathan, MD

11:40 AM **Gonadal Function and Fertility Preservation in Patients with Sickle Cell Disease**  
Sobenna George, MD

12:10 PM **Q&A and Discussion**

12:20 PM LUNCH BREAK

## Advocating for Patients with Sickle Cell Disease: Empowerment and Action

MODERATOR: Kanayo Nwankwo, MD

1:00 PM **Addressing Healthcare Equity for Patients with Sickle Cell Disease in the United States**  
Hamda Khan, MA

1:30 PM **Global Health Perspective**  
Nkechi Azinge-Egbiri, JD, PhD

- 2:00 PM **Community Based Organization Advocacy**  
Candice Young-Deler
- 2:30 PM **Q&A and Discussion**
- 2:40 PM **BREAK**

## Living With Sickle Cell Disease: Stories From Those Who Know it Best

**MODERATORS:** Natalie Sommerville-Brooks, MSN, RN, FNP-BC  
Claire Templeman, MSN, RN, CPNP-AC

- 2:50 PM **Sickle Cell Disease Warrior Panel**  
Destiny Hannah  
Erick Hannah  
Sasha Arias  
Kayla Smith-Owens  
Mekhai Genfi  
Tamika Hearn (mother of Mekhai)  
Bukola Bolarinwa
- 3:40 PM **Q&A and Discussion**
- 3:50 PM **Closing Remarks**  
Maria Cancio, MD
- 4:00 PM **ADJOURNMENT**

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# Accreditation

Memorial Sloan Kettering Cancer Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

## AMA CREDIT DESIGNATION STATEMENT

Memorial Sloan Kettering Cancer Center designates this live activity for a maximum of **13.25 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## MOC/CC RECOGNITION STATEMENTS

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 13.25 credits/points in the following certification programs:

- Medical Knowledge MOC points in the American Board of Internal Medicine's (**ABIM**) Maintenance of Certification Assessment Recognition Program; and
- Lifelong Learning & Self-Assessment MOC points for the American Board of Pediatrics (**ABP**) Maintenance of Certification program.

MOC/CC points will be reported to your board within 45 days of course completion.

## ANCC CNE STATEMENT

An application for NCPD credits has been submitted.

## ADVANCED PRACTICE PROVIDERS

- American Academy of Nurse Practitioners National Certification Program accepts *AMA PRA Category 1 Credits™* from organizations accredited by the ACCME.
- American Nurses Credentialing Center (ANCC) accepts *AMA PRA Category 1 Credits™* from organizations accredited by the ACCME.
- National Commission on Certification of Physician Assistants (NCCPA) accepts *AMA PRA Category 1 Credits™* from organizations accredited by ACCME.



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